

THE ABSTRACT

Uninterrupted digital communications are provided between a central office and a customer premises by using a high-pass or bandpass filter to bypass local loop generation equipment. In many present-day telecommunications installations, local loop generation equipment may be placed in series with a communications path that runs between the central office and the customer premises. This communications path is adapted to convey digital signals as well as voice information and/or other types of baseband communications signals. In order to avoid interference between baseband signals and digital signals, each of these signals is allowed to occupy only a specified portion of the frequency spectrum. When activated, the local loop generation equipment breaks the entire communications path, interrupting voice signals, as well as any digital signals which may be carried thereon. The techniques disclosed herein solve the problem of interrupted digital communications by bridging a frequency-selective filter across the local loop generation equipment so as to provide an alternate path for digital signals around the activated local loop generation equipment. In cases where the digital signals occupy frequencies above baseband, the frequency selective filter may be implemented using a high-pass filter and/or a bandpass filter. In this manner, a digital communications path between the central office and the customer premises is provided at all times.